د. هيثم المهدي   إيمان محمد معز زم

Case senario   1119

emergency and spleen

A 32 yr old man with no significant past medical History presents to emergency room with History of RTA, patient complaining of pain in his Left side of chest and abdomen as he crushed on Lt side door by another Car, patient was anxious, dyspneic, his pulse rate 115/min, and Bp 90/60 on chest examination he has decrase air entry on Lt side and hyper Resonance on percussion in the same side. His abdomen was tender, more on Lt side, with positive bowel sound.

*Que:- ① what's the primary mangement you should do?
② after pri mangement, the pt improved, and then his pulse rate and Bp dropped again. what's youre next step?
③ if there's splenic injury what's your next step?
④ what's the most important complication of splenectomy?
⑤ what you should do to avoid late complication?

* answer the Que:-

① ABCDE identification and treatment of Life threatining condition: A → airway with cervical spine precaution B → breathing C → circulation.

D → Disability

E → exposure.

C → wide pore Cannulae, good IV Fluid

(1) breathing → patient have tension pneumothorax
so Do chest tube if open pneumothorax

but if tension do needle decompression → intercated tube

(1) A → ① inspect any FB ② examin for Stridor, hoarseness ③ gurgling ; pooled secretion or blood

→ assume C-spine injury in patien with multiple tourma
- C-spine clearance is both clinical and Radiological
- C-Collar should Remain in Place until patient can cooperate with clinical exam

* airway intervention → ① Supplemental oxygen ② suction
③ chin Left / Jaw thrust ④ oral / nasal airway
⑤ Definitive airway → RSI (Rapid sequence intubation)
ETI for comatose patient GCS < 8

(2) B → Inspect, palpate, asculate.
- Deviated trachea, crepitus, flail chest, sucking chest wound, absence of breath sound. → Paradoxical breathing
→ CXR to evaluate lung fields.
if there crepitus → subcutaneous emphysema

* Breathing intervention :-

* ventilate with 100% oxygen
* needle decompression if tension pneumothorax suspected
* chest tube for pneumothorax / hemothorax
* occlusive dressing to sucking chest wound
* if intubated evaluate ETT position.

* C → * Hemorrhagic shock should be assumed in any hypotensive trauma patient
* Rapid assesment of hemodynamic status.

① level of consciousness
② skin color ③ pulses in 4 extremities ④ BP and pulse.

* Circulation intervention :-

- Cardiac monitor
- apply pressure to site of external hemorrhage.
- establish IV access.

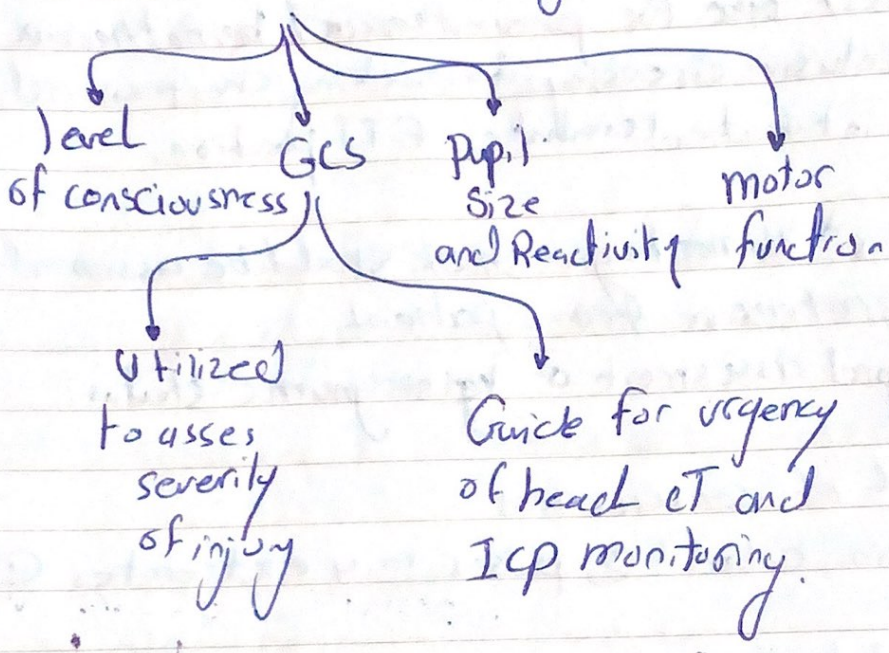
2 large bore IVs

central line if indicated

- Cardiac temponade de compression if indicated.
- Volume Resuscitation.

① have blood ready if needed
② level one infusers available
③ Foley catheter to monitor Resuscitation.

* [D] → * abbreviated neurological exam.



* Disability intervention:-

① spinal cord injury high does steroid if within 8 hr
② ICP monitor → neurosurgical consultation
③ if elevated ICP:
→ Head of bed elevated
→ mannitol → hyperventilation → emergent decompression.

* [E] → * complete disrobing of pt
* logroll to inspect back
* Rectal temp
* warm blankets / external warming device to prevent hypothermia

look for abdomen → distension, tenderness, seatbelt marks, penetrating trauma, Retroperitoneal ecchymosis

* Look for ① kehrs sign ② late Cullen's sign ③ balance sign
↓
special sign

* Do NGT for prevent aspiration.

* give blood packing and cross matching

* measure blood

Do FAST exam. → 4 views: Focused abd scanning for trauma
cardiac
RUQ
LUQ
Suprapubic

↓
goal evalute for free fluid
↓
in morrison's pouch bet liver and kidney.

sec survey

- then transfer patien to operating ward
- transfer to ICU.

⊖ Sec survey → allergies, medications, PMH last meal / event
full physical examination, frequnt assesmt to vital sign
Dx study → xray, lab work, CT, Fast exam
↓
CBC / K / Cr / PTT, Urine, ABG

Q2 * Do ABC again.
* if not Response
↓
~~Re~~

Circulation → 2 Large pore canula → Hb for comparena
cross matching
- Urine catheter → asses Response. + Blood group
→ look For chest → chest tube → gush of blood
abdomen → fast
~~Pleura~~ pelvis
1500 CC Decompression
200 cc = thoracotomy
unstable

⊗ sign of spleen injury
great trauma, - and site of bleeding
thorax, abd, pelvic, lung

* and fast to know
site of bleeding.
4 area
peritoneum, douglas pouch

Q_3 Do splenectomy if ther spleen injury.

if unstable

if stable → opseration for 12 days

Q_4 the most important complication of splenectomy?

- haemorrhagic
- pancreatic injury
- bowel injury
- Diaphragmtic injury

- Hematoma
- wound infection
- lung complication
- pl effusion
- DVT
- paralytic ileus
- pneumonia

- OPSI ← most common
  - overwhelming post splenctomy infeation
- splenosis.

* OPSI → rapidly fetal infeation following Removal of spleen
  - incidence 0.83, 0.42% per yr.
  - occurs 1st few yr after splenectomy.
  - Common organism.
    - s-pneumonia
    - H. influenza
    - n. meningitis.
- mortility rate
  - 50-80%.

Symptom → x start el Flu like symp
x meningitis or sepsis
x Rapidly progressive 12-48hr

Q5 ① pneumococcal vaccine (>2yr)
against streptoccus pnemonia, H.influenza, meningiococcal

adminstation el in 24-48hr after splenectomy
in emergency give vaccine 3rd day
if elective → before 2w

② antibiotics → pencilline IV 125mg bd (<3yr)
250 mg bd (3-14yr) 500mg bd (adult)

③ post splenectomy → asprine for thrombocytosis
